MASTER OF SCIENCE HANDBOOK
BUILDING SCIENCE, TECHNOLOGY AND SUSTAINABILITY
2022–2023
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELCOME!</td>
<td>4</td>
</tr>
<tr>
<td>OVERVIEW: THE MASTER OF SCIENCE IN ARCHITECTURE PROGRAM</td>
<td>4</td>
</tr>
<tr>
<td>ORGANIZATION: WHO MAKES THE DECISIONS?</td>
<td>4</td>
</tr>
<tr>
<td>Your Faculty Advisor</td>
<td>6</td>
</tr>
<tr>
<td>The M.S./Ph.D. Committee</td>
<td>6</td>
</tr>
<tr>
<td>The Head Graduate Advisor</td>
<td>7</td>
</tr>
<tr>
<td>REGISTRATION &amp; CLASS ENROLLMENT</td>
<td>7</td>
</tr>
<tr>
<td>Clipper Card</td>
<td>9</td>
</tr>
<tr>
<td>GRADING REGULATIONS</td>
<td>9</td>
</tr>
<tr>
<td>Grading Options</td>
<td>9</td>
</tr>
<tr>
<td>Required Grade-Point Average</td>
<td>10</td>
</tr>
<tr>
<td>What Courses Count Toward the Degree Requirements?</td>
<td>10</td>
</tr>
<tr>
<td>Incomplete Grades</td>
<td>10</td>
</tr>
<tr>
<td>PROGRAM OF STUDY: THE MASTER OF SCIENCE CURRICULUM</td>
<td>11</td>
</tr>
<tr>
<td>Research Areas</td>
<td>11</td>
</tr>
<tr>
<td>Program of Study</td>
<td>11</td>
</tr>
<tr>
<td>Inside Field</td>
<td>11</td>
</tr>
<tr>
<td>Planning Your Program</td>
<td>11</td>
</tr>
<tr>
<td>PROGRAM REQUIREMENTS FOR STUDENTS IN THE M.S. PROGRAM</td>
<td>11</td>
</tr>
<tr>
<td>Courses in Architecture</td>
<td>12</td>
</tr>
<tr>
<td>Research Methods</td>
<td>12</td>
</tr>
<tr>
<td>Courses in Your Inside Specialty Area</td>
<td>12</td>
</tr>
<tr>
<td>Architecture Breadth Requirement</td>
<td>12</td>
</tr>
<tr>
<td>Thesis Coursework</td>
<td>12</td>
</tr>
<tr>
<td>Electives Outside of Architecture</td>
<td>12</td>
</tr>
<tr>
<td>Waiving and Substituting Requirements</td>
<td>12</td>
</tr>
<tr>
<td>Degree Check and Advancement to Candidacy</td>
<td>13</td>
</tr>
<tr>
<td>FINAL DEGREE REQUIREMENTS: THE THESIS</td>
<td>13</td>
</tr>
<tr>
<td>Thesis Committee</td>
<td>13</td>
</tr>
<tr>
<td>Thesis Format</td>
<td>14</td>
</tr>
<tr>
<td>Formal Review</td>
<td>14</td>
</tr>
<tr>
<td>Thesis Schedule: Deadlines</td>
<td>14</td>
</tr>
<tr>
<td>Filing Fee</td>
<td>14</td>
</tr>
</tbody>
</table>

*M.S. Architecture Handbook* 2
TRANSITION FROM THE M.S. TO THE PH.D. 15
Application Submission and Schedule 16
Special Studies Courses — Architecture 299 (Independent Study) 16

FINANCIAL ASSISTANCE: SOURCES OF FUNDING 17
Need-Based Financial Aid 17
Departmental Financial Assistance: Prizes, Awards, Competitions, Etc. 17

HOW MUCH WILL IT COST? 19

ESTABLISHING CALIFORNIA RESIDENCY 19

APPENDIX A — MS DEGREE CHECKLIST  A-20

APPENDIX B — POLICY STATEMENTS  A-21
  Architecture Department-Level Graduate Appeals Procedure
  Sexual Harassment Policy: Berkeley Campus Sexual Harassment Policy Information
  for CED Students
  Respect and Civility in the Campus Community
  Student Record File Disclosure Policy
  BSTS Authorship Guide
I. WELCOME!

WELCOME to the Department of Architecture. In this booklet we hope to explain many procedural aspects of the Master of Science in Architecture program. However, nothing written could cover it all. When questions come up, make the Arch Grad Office (232 Wurster) your first stop: if we don't know the answers, we'll help you find the person who does. We welcome your visits!

The Graduate Student Affairs Officer (GSAO) manages the Graduate Office. The Graduate Admissions Officer will also assist you when the GSAO is unavailable or when things get busy.

Office hours: Monday - Friday
9 am–12 pm and 1–4 pm
Phone: 510-642-5577
Email: likoch@berkeley.edu, archgrad@berkeley.edu
Website: https://ced.berkeley.edu/academics/architecture/programs/master-of-science/

II. OVERVIEW: THE MASTER OF SCIENCE IN ARCHITECTURE PROGRAM

BACKGROUND: The last two decades have seen rapid growth in the complexity of buildings and the development of specialized knowledge for their design and operation. The building profession now requires a wider range of expertise in design, operation, and management than was required in the past, and new types of professional specialists have emerged to provide this expertise. Often these experts are educated outside of traditional architectural programs, frequently through studies in other disciplines. The Master of Science in Architecture was developed to offer the opportunity for advanced research work in these specialized areas within an architecture curriculum.

The M.S. is intended to supplement but not supplant the Master of Architecture degree, the professional degree accredited for the practice of architecture. The M.S. is appropriate for those wishing to pursue specialized knowledge in the ever-broadening and increasingly complex sub-fields within architecture.

THE DEGREE: The M.S. degree offered by the Department of Architecture is an academic, non-professional degree emphasizing coursework and supervised independent research in one of the following areas of study:

● Building Science, Technology and Sustainability

III. ORGANIZATION: WHO MAKES THE DECISIONS?

The Department of Architecture operates within a framework of rules made by the State, the University, the Berkeley campus, the College of Environmental Design and ourselves. The
Department and Graduate Division rules for getting the degree are spelled out in various Graduate Division and Department websites: Resources & Services for Graduate Students or Academic Policies < University of California, Berkeley. Should you run into problems, require clarification of the rules and regulations, or seek to waive some part of the requirements, start with the staff of the Arch Graduate Office. We should be able to tell you at what level the solution to your problem will be found. Should the problem require a waiver of the formal rules, we will make sure that it comes to the attention of the appropriate party, the M.S./Ph.D. Committee, The Head Graduate Advisor, or the Dean of the Graduate Division.

NOTE ON RED TAPE: Graduate life in one of the world's biggest universities and in one of the country's largest departments of architecture seems inevitably to be controlled by "red tape." Sorry, but that's the way it is. But for those who can "do the forms," this is an extraordinarily open and flexible department. It has no lock step curriculum; within broad limits each student designs his or her own program. Students do, however, have the responsibility to be aware of the rules. To avoid problems, please ask for information when you have uncertainties.

THE ADMINISTRATIVE BIG PICTURE: Most of your administrative interaction will be with the staff in the Arch Grad Office, your Faculty Advisor, and occasionally the M.S./Ph.D. Committee, but here is the official chain of command:
A. Your Faculty Advisor

Upon entering the M.S. program you will be assigned two faculty advisors. Your faculty advisors provide counsel on matters pertaining to course selection and degree requirements, and will help you assemble your thesis topic and committee. S/he also maintains a familiarity with your overall progress. It is your responsibility to maintain regular communication with your advisor.

Your initial faculty advisor need not necessarily serve as the direction of your thesis research, but arrangements should be made as early as possible in your program if you want to change advisors.
B. The M.S./Ph.D. Committee

The Master of Science program is directed by the Building Science, Technology and Sustainability M.S./Ph.D. Committee. The Committee, composed of faculty representing the BSTS study areas of the program plus two student members (elected by his/her fellow students). In administering the M.S. program, each Committee is responsible for the following:

- reviewing applications for admission to the program;
- defining the scope of the MS program, and maintaining its overall standards, policies and procedures;
- reviewing proposals for thesis projects;
- examining petitions for exceptions to program requirements;

C. The Head Graduate Advisor

The Head Graduate Advisor is the official deputy of the Dean of Graduate Division in matters affecting graduate students in the Architecture program. For instance, only the Head Graduate Advisor is authorized by the University Graduate Division to approve various forms, memos and petitions submitted by graduate students to the Graduate Division. If the student is asking for something out of the ordinary, late add/drops, readmission to the program, extension of candidacy, increase in the amount of work hours as a GSI/GSR, in all these matters the Head Graduate Advisor must judge whether or not the student’s request or the proposed action is in order, is in the best interest of the student and the program, and is feasible under existing regulations. The Head Graduate Advisor speaks for the department on matters concerning the progress and standing of individual graduate students with the University.

The Head Graduate Advisor is nominated by the Chair of the Department and appointed by the Dean of the Graduate Division. Decisions on Ph.D. matters are made by the Ph.D. Committee, which then makes its recommendations to the Dean of the Graduate Division via the Head Graduate Advisor.

The M.S./Ph.D. Committee works closely with the Head Graduate Advisor, and makes recommendations concerning the administration of the Master of Science program.

IV. REGISTRATION & CLASS ENROLLMENT

Everyone is required to be registered for 12 units each semester. You will register for classes through the enrollment system, Cal Central: CalNet Authentication Service. Well in advance of each semester (the middle of April for fall semester and early November for spring semester), continuing students can, with the aid of the Arch Department course website (Courses - UC Berkeley College of Environmental Design), the Campus Solutions Schedule of Classes (Berkeley Class Schedule) and in consultation with your advisor, choose the courses you want for the next term and enroll in them online. When you complete your CAL Central registration, recheck to
confirm that you have exactly the classes you want to be enrolled in, the number of units and the grading option for the next semester.

If you are a new student, to begin your registration process, you must enroll in at least one course by the deadline set by the University--check your listing on the CAL Central site. (Don't worry if you haven’t been able to meet with your faculty advisor before you sign up for classes. You will have the first five weeks of school to add/drop classes. Check with the grad office staff for further information.) To complete the registration process, you must pay at least the first installment of your fees by the deadline.

MAKING CHANGES: ADDING AND DROPPING CLASSES

If you wish to either add courses or drop them, you may do so during the first five weeks of each semester by getting on CAL Central as you did when selecting your original courses. It is a good idea to check on CAL Central from time to time throughout the semester to make sure that your study list is correct.

Adding and dropping courses is a fairly straightforward process AS LONG AS YOU ADHERE TO THE DEADLINES:

- You may drop courses without a fee through CAL Central by the end of the 2nd week of class and add by the end of the 3rd week.
- After the deadline, a fee is charged for each class that you add or drop:
  - $10 is charged for each class dropped;
  - $5 is charged for each class added
- LAST DAY YOU CAN ADD or DROP or Make Any Changes on CAL Central is at the end of the 5th week
- After the 5th week, the Graduate Office has to manually add and drop classes by petition
- LAST DAY TO ADD or DROP without the Dean of Graduate Division’s approval is the last day of instruction.
- GRADING OPTION and VARIABLE UNITS may be made up until the last day of formal classes (no fee)

PETITION TO CHANGE CLASS SCHEDULE is available at:
https://bcsweb.is.berkeley.edu/sp/employm/SA/s/WEBLIB_PTAL.ISCRIPT1.FieldFormul-script_PTAL_DASHBOARD?tab=G3WORKCENTER&ucFrom=CalCentral&ucFromText=My%20Dashboard&ucFromLink=https%3A%2F%2Fcalcentral.berkeley.edu%2Fdashboard

Adding or changing units to a course requires the instructor’s signature. No instructor signature is required for drops or grading options. Turn in the completed Petition to Change Class Schedule form to the Graduate Office. The charges for the adds and drops will appear on CAL Central.
Graduate Student Instructor (GSI), Graduate Student Researcher (GSR), or fellowship holder may not fall below the minimum number of 12 units a semester necessary to hold such a position or fellowship. International students may not drop below a full program of study.

Adding or Dropping Courses After the Deadlines

After the deadlines, adding or dropping courses becomes more difficult. In addition to paying the fees noted above and securing the signature approval of the Head Graduate Advisor, you must write a letter to the Dean of the Graduate Division outlining the extraordinary circumstances that lead you to seek an exception to the deadlines. You must submit the “Petition to Change Class Schedule” and the letter to the Dean, to the Arch Graduate Office and they will submit the paperwork along with a supporting memo to Graduate Division to request the change. There is no guarantee that the Dean will approve your request.

If you cease to attend a course and fail to drop it, an "F" grade will be assigned at the end of the semester.

Under no circumstances will a petition to drop a course be approved because the student finds an anticipated grade inconvenient.

CAL 1 Card

The official UC Berkeley identification card is white with a computerized photo of the student. It is your pass to campus services and facilities as well as Wurster Hall and the Ph.D./M.S. Room 470 after normal building hours. As soon as possible, have your photo taken at Lower Sproul Plaza. When you go to the Cal photo ID Office to obtain your card, please present your government issued photo identification card (a driver’s license or passport) and Student Identification Number. For more info visit: Cal 1 Card.

The Cal 1 Card provides access to various campus facilities and events and can be used as a debit card at a selection of campus and nearby merchants. In addition, Architecture students may use the Cal 1 Card for access to the Arch Shop and computer labs. All related fees for computer printing and lab, CAD/CAM printing and lab, Architecture Shop, and Architecture photo lab can all be paid for using your card.

- Clipper Card

Students are issued an AC Transit Easy Pass Clipper card which is loaded with an electronic Class Pass. Continuing students will be able to access their ridership privileges continuously as long as they are registered. The Easy Pass Clipper Card will also allow students to load cash value to pay for BART rides and other transit passes in the Bay Area. The initial Clipper card is issued at the Cal 1 Card Office. For more info go to: Bear Transit and Class Pass/EasyPass - Cal 1 Card.
V. GRADING REGULATIONS

A. Grading Options

There are two options for grading, either a letter grade, or the satisfactory/unsatisfactory option (S/U). You must take your required courses, including methods, and your thesis work for a letter grade. Your elective courses may be taken on either a graded or an S/U basis.

Things you need to know about the S/U option:

- Overall, you may take no more than 1/3 of your total units on a satisfactory/unsatisfactory basis.
- Courses taken S/U do not figure into your grade-point average. Even if you do not pass the course, and earn a "U," it will not affect your GPA but you will not receive any units.
- The "satisfactory" in S/U implies work that is done at the level of B- or better. Thus, if you take a course S/U and your level of achievement is below B-, you will get a "U" (and earn no credit).
- With the letter grade option, you will still get units and academic credit for grades as low as a C-, anything lower will not receive credit.

B. Required Grade-Point Average

Graduate students must maintain an overall grade-point average of 3.0 to avoid academic probation. (You will get credit for individual grades as low as C-, but your overall GPA must be 3.0 or above.)

C. What Courses Count Toward the Degree Requirements?

Only courses numbered in the 100's and 200's will count toward your degree requirements. You may, of course, take courses numbered below 100, such as PE or language classes, but they will not count toward your degree unit requirement. Also courses number 375 for GSI pedagogy teaching will not count towards your degree.

D. Incomplete Grades

The grade "I" may be assigned when a student's work is of passing quality, but is incomplete because of valid circumstances beyond the student's control (e.g. sudden illness the day of the examination, family problems, or unanticipated research problems). If the instructor agrees that a grade of "Incomplete" may legitimately be given, he/she will report an "I" on the grade report at the end of the semester.
Removing an Incomplete Grade

An “I” grade remains on the record until the work is completed and submitted to the instructor for a grade. The instructor changes the grade on CAL Central.

If there are more than two incompletes, it will block applying for Advancement to Candidacy or being hired as a GSI or GSR. However, an Incomplete may stay on the record as long as the course is not needed for the degree or the work necessary to complete the “I” would only impede the progress toward the degree.

VI. PROGRAM OF STUDY: THE MASTER OF SCIENCE CURRICULUM

A. Research Areas

Each student in the BSTS Master of Science program has been admitted to carry out research in Building Science, Technology and Sustainability

Research topics outside of these fields or combinations of several areas of may be undertaken, subject to approval of the Departmental M.S./Ph.D. Committee, if supported by qualified departmental faculty members.

B. Program of Study

- Inside Field

The Inside Field is pursued within the intellectual context of one of the department’s field of study: Building Science, Technology and Sustainability. You must complete a minimum of 9 units of graduate course work in your Inside Field of study in the department.

Inside fields outside of these areas of combinations thereof may be undertaken, subject to support by qualified departmental faculty members who are available, willing, and competent to provide the necessary instruction and guidance. For students who wish to change to another Inside Field after they’ve joined the program, a formal request detailing the proposed change must be submitted to the Ph.D. Committee.

C. Planning Your Program

The description below outlines the general program requirements for the Master of Science. As each person has been admitted to the program to carry out an individual research project, no specific curriculum sequence applies. Although the program is flexible, your coursework must fit into the various categories outlined below. With your advisors assistance, make a study plan as soon as possible to make the most of your opportunities.
PROGRAM REQUIREMENTS FOR STUDENTS IN THE M.S. PROGRAM

- **UNITS required for degree:** 36 (minimum), as follows:
  
  Research methods, Arch 241: 3 units  
  Inside Field units: 9 units (minimum) or 3 classes  
  Arch Breadth: (outside of specialty if no degree) 6 units (minimum) or 2 classes  
  Thesis work: 5 units  
  Electives: 13 units  

Degree work should be completed in three semesters.

CURRICULUM

a.  Courses in Architecture

  (1)  Research Methods

  One research methods course (ARCH 241) is required of everyone and is specific to your major research area. You will decide which course to take in consultation with your advisor.

  (2)  Courses in Your Inside Specialty Area

  A minimum of nine units or three classes of Architecture course work must be completed in your specialty area as agreed to with your advisor. These courses should be numbers within the 200 level graduate courses.

  (3)  Architecture Breadth Requirement

  For those without an academic background in Architecture, a minimum of six units or two courses of graduate coursework in areas of the architecture curriculum outside of your area of specialty is expected. (No waivers of this requirement will be made.)

  (4)  Thesis Coursework

  Thesis coursework consists of a 5-unit independent study course (Arch 299) undertaken with the Chair of your thesis committee.

b.  Electives Outside of Architecture

  The remaining number of units of course works related to-- or supportive of--the specialty area may be undertaken in departments outside of Architecture.
D. Waiving and Substituting Requirements

Occasionally a student will have reason to believe that a required course should be waived or they wish to substitute an upper division undergraduate course as part of their graduate program to fulfill their requirements. If you wish to seek an exemption from one of the above requirements, discuss your request with your faculty advisor. If s/he agrees that it seems reasonable, submit your request in writing--including the endorsement of your advisor-- to the M.S./ Ph.D. Committee using a waive an substitute form:

http://ced.berkeley.edu/ced/students/graduate-advising/graduate-forms-documents/ .

E. Degree Check and Advancement to Candidacy

In your final semester when you plan to complete the requirements for the M.S. degree, ask the Grad Office for a final "degree check" to make sure that you have satisfied all unit, subject area and residency requirements.

You will be required to submit: "M.S. Thesis Proposal Form” to propose your thesis topic and committee for the approval of the M.S./ Ph.D. Committee, https://docs.google.com/forms/d/12jKleP7sedmcE2Cy-nnewStd3hHr2Q9IP7ceRf_TJuM/edit

You will have two options for advancing to candidacy. The first is Plan 1 which is a formal University thesis and you advance to candidacy through an electronic form in CAL Central, “Higher Degree Committees Form”. The Second is Plan 2 which is processed through the Arch Grad Office. You will be automatically placed in Plan 2 when you enter the program and if you want to do the University thesis, you will submit the application for Plan 1 to change your candidacy.

VII. FINAL DEGREE REQUIREMENTS: THE THESIS

An independent research thesis is the culmination of your Master of Science program. Of course your thesis topic will be developed over the course of your studies, but it must be formally proposed for the M.S./Ph.D. Committee's approval at the beginning of your final semester. If the committee has any questions or reservations about the scope or the methodology of your proposed thesis topic, you will be notified immediately. When your topic is approved, you will be given the course control number for your thesis coursework, a five-unit independent study course (Arch 299).

A. Thesis Committee

If you are doing a University Thesis under Plan 1, your thesis committee must have a minimum of three members, one of whom MUST be from a department other than Architecture. The remaining two members must be faculty from the Department of Architecture. All three must be members of the Berkeley Academic Senate (i.e., persons holding the academic title professor, associate professor, or assistant professor). Exceptions may be made for additional
members not holding these titles. However, you may only have ONE such exception on your committee. See the Grad Office for more information. Be aware that your thesis committee requires a faculty member from outside the Dept. of Architecture. It is better to take classes from a potential committee member before asking him/her to be on your thesis committee, than to wait until the last minute and ask someone who does not know you or your work.

If you are doing a Departmental Thesis under Plan 2, your thesis committee must have a minimum of two members, and at least one must be in the Department of Architecture. If you also want someone outside the department as well, then you would have a three-member committee.

B. Thesis Format

The University Thesis must be prepared according to the Graduate Division regulations. Guidelines are available at: Thesis Writing and Filing - Berkeley Graduate Division

The Departmental Thesis is up to the discretion of the thesis committee.

C. Formal Review

One month before submission of your University Thesis to the Graduate Division, you are required to present your complete thesis draft to your committee members, who will review your work and suggest any final changes. It is your responsibility to make sure that your entire committee will be available to review your final draft and you will be able to process any changes, since it is a significant step in the completion of your degree program.

The Departmental Thesis must also be presented to your committee at least a month before the end of the semester for review, to allow for any editing changes or corrections.

D. Thesis Schedule: Deadlines

- THESIS PROPOSAL must be submitted before the beginning of the semester you intended to graduate.

- UNIVERSITY ADVANCEMENT TO CANDIDACY form must be submitted on CAL Central
  - For Fall Degree: 3rd week of the semester
  - For Spring Degree: 3rd week of the semester

- DEADLINE FOR SUBMISSION OF COMPLETED THESIS, along with signature approvals from each committee member:
  - For Fall Degree: Last day of the semester
  - For Spring Degree: Last day of the semester
E. **Filing Fee**

What happens if you do not complete your thesis by the deadline?

The Filing Fee is a reduced fee for graduate students who have completed all requirements for the degree except for filing the master thesis and securing the required signatures on the title page. While it allows a student to submit the thesis, it may only be used once, following a registered semester or 3-unit summer registration and you cannot hold a GSI or GSR position while on Filing Fee nor receive any financial/departamental aid.

Filing Fee will only be approved after the Graduate Office receives confirmation from your inside committee members that they have received a full draft of your thesis and believe that any edits or changes will be completed in the time provided.

**Warning:** Filing fee status is **NOT** equivalent to registration! If you have student loans, you should check to find out what the implications of your status will be on your loan repayment schedule. Health insurance or library privileges or Recreational Sports Facility (RSF) privilege may be purchased separately when presented with a memo from the Grad Office stating that you are a student in good standing on filing Fee.

**Students must apply for the Filing Fee by the first day of class of the semester in which they intend to file.** Available under “Special Enrollment Petition” on CAL Central Dashboard.

**IMPORTANT:** **Human Subjects Protocol** If your thesis will involve human subjects in any way (including such interaction as interviews or questionnaires) you **must** have your research plans approved by the Berkeley Campus Committee for the Protection of Human Subjects **BEFORE YOUR RESEARCH IS BEGUN.**

Federal law and University policy require that all research, on or off campus, involving human subjects **in any way** conducted by graduate students in pursuit of an advanced degree must be approved or exempted by the Committee for the Protection of Human Subjects (CPHS). Approval must be gained **before** the research is begun. Research involving human subjects conducted without the approval of CPHS is invalid and the degree will not be awarded.

Only CPHS can determine whether your research is eligible for exemption or will require a full review. Each student must be granted individual approval by CPHS. To ensure compliance with federal law and University policy, please call the Committee at (510) 642-7461 or UC Berkeley.

**VIII. TRANSITION FROM THE M.S. TO THE PH.D.**

The M.S. degree is a step toward acquiring some research credentials that will qualify you to seek a research career in one of the sub disciplines of architecture. If your intention is to pursue a teaching and scholarly career, you might consider applying to the Ph.D. program. Although all of the course work you are pursuing in the M.S. program will also count towards your Ph.D.,
transition from the MS to the Ph.D. is NOT automatic. The M.S./Ph.D. Committee will compare your application with the others directly applying to the Ph.D. program.

In addition to the 36 units that you are required to finish while pursuing the M.S., you will be expected to complete your M.S. thesis at the time of your admission to the program. Additional requirements after admission to the Ph.D. program include:

- One or two Outside Minor Fields (Consisting of 4 regular graduate courses of 12-16 units; or 2 graduate classes in each if you pursue two fields with a 6 unit minimum in each);
- written qualifying examination;
- comprehensive oral examination; and
- dissertation.

A. Application Submission and Schedule

In order to apply to the Ph.D. program from the M.S., you submit a Ph.D. application to the University admissions website by the posted deadline with all the required material as if you were a new applicant. You will be evaluated with the other applicants to the program and considered for the funding awarded to Ph.D. students.

Those who succeed in being admitted to the Ph.D. program and who succeed in taking their qualifying exams by the end of their second year in the Ph.D. program will also earn the Dissertation Completion Fellowship (DCF) which is offered by the Graduate Division. This fellowship covers tuition, fees and stipend for one whole year after advancing to candidacy.

B. Special Studies Courses — Architecture 299 (Independent Study)

Content and Purpose of Special Studies Courses. An Arch 299 course offers you the opportunity to undertake work with one of the faculty on an independent basis. The purpose of an independent study is to offer a greater flexibility in the range of course offerings, or the opportunity to search out and study in greater detail, subjects unavailable in the ordinary course offerings. Comparable work per unit credit with regular courses is expected.

The 299 is not a vehicle for getting academic credit for doing a job. For example, construction or drafting work on private commissions will not be given academic credit. A job can be a vehicle for learning, but credit will not be given merely for work where neither the intent nor the academic value is clear. If some other activity in conjunction with the work is to be performed for an academic purpose that would not ordinarily be pursued, this segment of the work could legitimately be done for credit. Work for which you are paid may not be assigned academic credit.

Only 9 units of Arch 299 units may be credited toward your program requirements. (This number includes the 5 units allowed for thesis work.)
Form for Special Studies Courses. Ideally, you should plan special studies work before the end of the preceding semester, but you may also add a special studies to your study list during the add/drop period. To do so, find a faculty member willing to sponsor your study and complete the SPECIAL STUDIES PETITION form available at: https://docs.google.com/forms/d/1TLZpC200SHGqUqg51yp0DBi4NY1msye1C799Fr8TCIGA/edit The special studies form will ask for the following information about the work that you propose:

- statement of intent and purpose
- the work involved and its schedule
- the end result (possibly the product)
- the instructor’s role
- means of evaluation
- schedule of meetings with your faculty sponsor

Discuss your plans with your faculty sponsor and have him/her approve the form, then notify the GSAO who will forward it for review by the Head Graduate Advisor. When your proposed study has been approved (this generally takes a day or two), you will be given a permission code and a class number so that you can add the 299 course to your schedule.

Significant faculty-student interaction is vital to a successful independent study. It is your responsibility to see that the work agreed upon is carried out: meetings with your faculty sponsor should take place on a regular schedule.

IX. FINANCIAL ASSISTANCE: SOURCES OF FUNDING

A. Need-Based Financial Aid

The University of California at Berkeley offers a wide variety of financial aid programs to help students meet their educational expenses. For University based funding and fellowships, go to: Graduate Fellowships and Awards. Financial aid is awarded on the basis of demonstrated financial need and is available to all citizens of the U.S. and foreign students who hold either an immigrant or refugee visa. Among the types of aid offered are grants, loans, work study.

Students generally must apply for government financial aid or loans, six to nine months in advance of the award period (late applications are subject to the availability of funds after the needs of on-time applicants have been met). All domestic students must use the “Free Application for Federal Student Aid” which will be available online at http://fafsa.ed.gov/


Each year the Department distributes awards to graduate students in the Department of Architecture including various scholarships, fellowships, grants-in-aid, prizes, competitions and summer internships. All eligible students are encouraged to apply. At the beginning of the Fall Semester, a complete schedule of the year’s awards, along with their deadlines and
requirements will be available at: Awards, Scholarships and Fellowships - UC Berkeley College of Environmental Design.

Graduate Student Instructorships

Many students hope to earn money and gain teaching experience by acting as a graduate student instructor. GSI hiring for the following semester takes place toward the end of the previous semester. Watch for e-mailed notices for the GSI application period. The Dept will post a hiring announcement on the Architecture website toward the end of each semester about available GSI positions for the following semester. The web announcement also outlines the procedure for applying to GSI positions. Generally speaking, it is assumed that applicants will have taken the course that they hope to teach (or its equivalent) and excelled in it. It’s an excellent idea to make your interest in teaching known to the instructor ahead of time: hiring is competitive and instructors want to choose those with knowledge, experience and enthusiasm.

After you submit your application for employment, the instructor of each course will review the applications submitted and make his/her selections from among them. The instructor then makes his or her recommendations to the Chair of the Department of Architecture, who, in turn, will make the departmental recommendations to the Graduate Division, which makes the final appointments. GSIs must be registered full-time graduate students. For GSIs, full time means registering for a minimum of 12 semester units. The Graduate Division will not appoint people with GPAs below 3.0 or with more than two incomplete grades.

Appointments are normally semester by semester and tied into work with a specific course. For a list of available GSI/GSR positions in the department please visit the Architecture website under “Employment.” Work at CED - UC Berkeley College of Environmental Design.

For a list of UC Berkeley GSI/GSR wage rates please refer to the Graduate Student Academic Appointments link: Graduate Student Academic Appointments.

The Graduate Division's Appointment’s Office staff handles and monitors all graduate student instructor, research, and tutor positions. For general appointment information please refer to the Graduate Student Academic Appointments.

In addition to the above-mentioned compensation, GSIs and Graduate Student Researchers employed at 25-44% receive a partial fee remission which includes their health insurance, tuition and Student Services Fee. Berkeley Campus Fee and Class Pass Fee are not covered. Full fee remission is available for GSRs working at least 45% time. Fee Remissions - Berkeley Graduate Division. For the prescribed hours of work per week include all class contact hours, class preparation, grading, etc. Graduate Student Academic Appointments.
• GSIs must be registered full-time graduate students at the time of appointment. GSIs are required to carry a minimum of twelve (12) upper division and/or graduate units (100 or 200 series) per semester.

• The Graduate Division will not appoint people with GPAs below 3.0 or with more than two incomplete grades.

• First-time GSIs must either have completed or be enrolled in a 375-level semester-long pedagogy seminar on teaching in the discipline offered by the department. This is course Arch 375. If you cannot take Arch 375 due to schedule conflicts, the pedagogy seminar should be taken in another department, with the advice and approval of the GSIs department and with the consent of the course instructor. The GSI Teaching and Resource Center will maintain a list of 375-level courses on its Web site.

• All first-time GSIs must successfully complete the Online Course on Professional Standards and Ethics in Teaching by the end of the third week of classes.

• All first-time GSIs must attend the GSI Conference Workshop offered by the GSI Teaching and Resource Center prior to the beginning of the semester they are hired to teach.

If you are appointed as a Graduate Student Instructor you may enroll in a GSI course (Arch 298) for which you can receive 1-3 credit. You may repeat this course, however, no more than three such courses -- a total of three units -- will count towards your unit requirements. This course must be taken S/U. Ask in the Grad Office for details.

X. HOW MUCH WILL IT COST?

The Office of Financial Aid has established average projected costs of attendance for students during the nine-month academic year. These budgets provide sufficient money for most circumstances, although architecture students traditionally spend far more on books and supplies than the budgeted amount. Student Budgets (Cost of Attendance) - Financial Aid & Scholarships
Registration fees: Fee Schedule - Office of the Registrar

XI. ESTABLISHING CALIFORNIA RESIDENCY

If you are a US citizen, but not a California resident, you can save money by establishing residency in California. For definitive information about residency matters, visit Residency (for Tuition Purposes) - Office of the Registrar for written detail.
## APPENDIX A

### MASTER OF SCIENCE DEGREE IN ARCHITECTURE: COURSE WORK CHECKLIST

<table>
<thead>
<tr>
<th>Name: ____________________________</th>
<th>Faculty Advisor: ____________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty Area: ____________________</td>
<td>Entered Program: ____________________________</td>
</tr>
</tbody>
</table>

**Total units required:** (3 semesters) 36

- **Completed 1st Semester:** - ______
- **Units Remaining:** - ______
- **Completed 2nd Semester:** - ______
- **Units Remaining:** - ______
- **Completed 3rd Semester:** - ______
- **Units Remaining:** - ______

### ARCHITECTURE COURSES COMPLETED:

- **Research Methods** Requirement: Area methods course (3 units) ☐
  
  (Arch 241)

- **Courses in the Specialty Area:** (9 units minimum) ☐
  
  (A minimum of nine units of Architecture course work must be completed in the specialty area.)

<table>
<thead>
<tr>
<th>Course title</th>
<th>course number</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course title</td>
<td>course number</td>
<td>units</td>
</tr>
<tr>
<td>Course title</td>
<td>course number</td>
<td>units</td>
</tr>
</tbody>
</table>

- **Courses in Architecture Breadth Area: for those without an Arch degree** (6 units minimum) ☐
  
  (A minimum of six units of Architecture course work must be completed outside the specialty area.)

<table>
<thead>
<tr>
<th>Course title</th>
<th>course number</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course title</td>
<td>course number</td>
<td>units</td>
</tr>
<tr>
<td>Course title</td>
<td>course number</td>
<td>units</td>
</tr>
</tbody>
</table>

- **Thesis:** Arch 299 (independent study) course sponsored by your thesis chair (5 units) ☐

---

*msc checklists.doc*
APPENDIX B

POLICY STATEMENTS

ARCHITECTURE DEPARTMENT-LEVEL GRADUATE APPEALS PROCEDURE

Purpose and Scope

The University and Department are committed to a policy against legally impermissible, arbitrary, or unreasonable discriminatory practices. All groups operating under The Regents, including administration, faculty, staff, student governments, University-owned residence halls, and programs sponsored by the University, are governed by this policy of nondiscrimination.

The University of California, in accordance with applicable federal and state law and University policy, prohibits discrimination, including harassment, on the basis of race, color, national origin, religion, sex, disability, age, medical condition (cancer-related), ancestry, marital status, citizenship, sexual orientation, or status as a Vietnam-era veteran or special disabled veteran.

The purpose of this grievance procedure is to provide Berkeley students an opportunity to resolve complaints alleging discrimination based upon any of the above listed grounds. This procedure is also available for the resolution of complaints alleging inappropriate application to a student of any other rules or policies of the Berkeley campus resulting in injury to the student, except as noted in IB below. It is the intent of this procedure that student complaints should be resolved, if at all possible, in the department or unit where they arise.

The University policy is here: https://sa.berkeley.edu/grievance

A. INFORMAL RESOLUTION PROCEDURES

A student may pursue informal resolution of a complaint by scheduling a meeting with the Head Graduate Advisor to discuss the complaint and explore possible avenues of resolution. If informal resolution is pursued, it must be initiated, and should be completed within 30 days. At any point in this process, if a satisfactory solution cannot be reached, the student may initiate formal resolution by putting the complaint in writing.
B. FORMAL ARCHITECTURAL DEPARTMENT PROCEDURES

The following procedures have been established by the Department of Architecture to deal with student grievances. NOTE: These procedures do not apply to grades, student employment, and student discipline, which are governed by separate University Policies in the link above.

1. Informal Resolution: a student should attempt to resolve the matter informally with the person alleged to have committed the violation.
2. If the matter cannot be resolved at Step 1, a student brings the grievance to the attention of the Chair of the Grievance Committee.
3. If a satisfactory solution cannot be provided by the Grievance Committee, the Chair of the Department will make the final grievance resolution for the Department.
4. If a student still wishes to appeal, the grievance shall be referred to the Dean of the College of Environmental Design.
5. After recourse to the Dean of the College, the resources of the College will be considered to have been exhausted. Undergraduate students should file with the Office of the Vice Chancellor for Student Affairs and graduate and professional school students should file with the office of the Dean of the Graduate Division.

C. APPEAL TO THE GRADUATE DIVISION

If the student is not satisfied with the outcome of the complaint under the Architecture Department's procedure, he or she may bring the complaint to the Formal Appeal Procedure of the Graduate Appeals Procedure. The formal appeal must be received in the Office of the Dean of the Graduate Division, 424 Sproul Hall, within fifteen days of the date of the written notification of the result of the unit level procedure. Copies of the Graduate Appeals Procedure (updated December 2, 1996) may be obtained from the Office of the Dean of the Graduate Division.

D. COMPLAINTS INVOLVING DISCRIMINATION

If the complaint involves allegations of discrimination or harassment on the basis of sex, race, national origin, color, age, religion, sexual orientation, or disability, the Architecture Department should consult the appropriate campus compliance officers prior to commencing informal or formal resolution. The names, phone numbers, and campus addresses of these individuals are listed in various campus publications and may be obtained from the Office of the Dean of the Graduate Division at (510) 642-5472 or the Academic Compliance Office at (510) 642-2795.

E. OTHER COMPLAINT PROCEDURES

Graduate students may contact the Office of the Ombudsman for Students, the Title IX Compliance Officer, or the 504/ADA Compliance Officer for assistance with complaint resolution. There also are other complaint resolution procedures listed in the Graduate Appeals Procedure for use regarding complaints that do not fall under this procedure.
SEXUAL HARASSMENT POLICY: BERKELEY CAMPUS SEXUAL HARASSMENT POLICY
INFORMATION FOR C.E.D. STUDENTS

The Berkeley campus is committed to creating and maintaining a community in which all students can feel free from harassment and intimidation. To ensure this, the University makes available a Title IX Compliance Officer who is responsible for ensuring that any allegation of sexual harassment is investigated and resolved. Campus policy on sexual harassment states that unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when submission to such conduct is made a condition of instruction, employment, or participation in a university activity; when submission to such conduct is used as a basis for making decisions affecting the individual; when such conduct unreasonably interferes with an individual's performance; or when such conduct creates an intimidating, hostile or offensive University environment.

If you feel you have experienced any form of sexual harassment you are encouraged to try resolving the problem informally within your department. If you feel you can comfortably talk to the person in question about their behavior, you might directly express your concern to them and try to come to a resolution of the problem. Another option is to get together with other students who have experienced or witnessed the same behavior and ask to meet the individual as a group. If you do not feel comfortable talking to the individual directly you can express your concern to a trusted faculty member, who can then discuss it with the individual or request the involvement of the appropriate administrative officer, such as the department chair or dean. Another way to attempt an informal resolution is to contact the Title IX Compliance and request what the university calls a “mediation process.” The Title IX Officer will attempt to facilitate the resolution of the dispute without the filing of any written complaint. However you elect to do it, this informal process is supposed to result in some agreement between you and your department that “appropriate corrective actions” will be taken. If you do not feel comfortable attempting an informal resolution or if the process of the informal resolution does not remedy the problem, you should contact the Title IX Compliance Officer and make a written complaint. This constitutes the beginning of what the university calls the “complaint resolution process.” Once the Title IX Officer receives the written complaint she will begin a full investigation. She will then prepare a report for the appropriate campus official (depending on whether the alleged harasser is a student, non-academic staff member, or faculty member), including a recommendation as to what action should be taken. If you are not satisfied that the action taken has resolved the complaint, or if you decide to bypass the mediation and complaint resolution process, you can file a formal complaint alleging the University has violated its policy prohibiting discrimination on the basis of sex. The Title IX Office can furnish additional information on the formal complaint process and on further avenues you can pursue if your complaint cannot be resolved through any of the above described procedures.

The time limit for filing a written complaint with the Title IX Compliance Officer to begin the complaint resolution process is 90 calendar days from the time you knew of the act of sexual harassment. If you have attempted to resolve the dispute informally, you have 30 days from the time the informal process is completed (or 90 days from the time you knew of the act of
harassment, whichever is longer). The total time period for the investigation of your complaint should not exceed 90 days, and the decision of the appropriate campus official should be made within 15 working days of the time they receive the CRO’s report.

University policy explicitly states that no person shall be subject to reprisal for using the mediation and complaint resolution process or for participating in the formal complaint process. In the mediation and complaint resolution process every reasonable effort will be made to protect the privacy of all parties, including the alleged harasser. As the complainant, you will not necessarily be given access to information about the action taken against the person you have accused of sexual harassment. Records relating to the investigation by the CRO and the disposition of the complaint will be made available to the parties involved in the complaint only in accordance with appropriate laws and University regulations.

**Campus Resources on Student Matters:**

ASUC Student Advocates Office: [http://advocate.berkeley.edu/](http://advocate.berkeley.edu/)
Campus Police Department: 1 Sproul Hall, 642-6760 [http://police.berkeley.edu/about_UCPD/contact-_info.html](http://police.berkeley.edu/about_UCPD/contact-_info.html)
Child Care & Family Services: [http://berkeley.edu/work/child.shtml](http://berkeley.edu/work/child.shtml)
Faculty Equity Associate: [http://ofew.berkeley.edu/](http://ofew.berkeley.edu/)
Gender & Equity Resource Center (Student Activities & Services): [http://geneq.berkeley.edu/](http://geneq.berkeley.edu/)
Main Library Info for Grad Students: [http://www.lib.berkeley.edu/information/graduate-students](http://www.lib.berkeley.edu/information/graduate-students)
Ombudsperson for Faculty and Students: [http://sa.berkeley.edu/ombuds](http://sa.berkeley.edu/ombuds)
Personnel Office - Employee Relations: [http://hrweb.berkeley.edu/about/contact](http://hrweb.berkeley.edu/about/contact)
Sexual Assault Counseling: [http://www.uhs.berkeley.edu/students/medical/sexualassault.shtml](http://www.uhs.berkeley.edu/students/medical/sexualassault.shtml)
Sexual Harassment & Violence Support & Education Program: [http://survivorsupport.berkeley.edu/](http://survivorsupport.berkeley.edu/)
Student Conduct Office: [http://sa.berkeley.edu/conduct](http://sa.berkeley.edu/conduct)
Title IX Compliance Officer: [http://ophd.berkeley.edu/about/staff](http://ophd.berkeley.edu/about/staff)

**RESPECT AND CIVILITY IN THE CAMPUS COMMUNITY**

The University of California at Berkeley is a public institution of higher education committed to excellence in teaching, research, and public service. Our student body represents the diversity of our state, and will provide its future leaders. Together the students, faculty, and staff form our campus community, which reflects a variety of backgrounds and cultures. The quality of life on and about the campus is best served by courteous and dignified interaction between all individuals, regardless of sex, ethnic or religious background, sexual orientation, or disability.

Therefore, the administration of this University publicly declares its expectation that all members of the campus community will work to develop and maintain a high degree of respect and civility for the wealth of diversity in which we are all fortunate to live and work together. This civility and respect for diversity ought to flourish in an atmosphere of academic freedom.
that is considerate and tolerant of the ideas of others. The administration of this University expects you to consult the student conduct code for specific regulations regarding respect and civility.

STUDENT RECORD FILE DISCLOSURE POLICY

Please refer to the following University site Disclosure of Information from Student Records. http://registrar.berkeley.edu/ferpa.html

The Office of the Registrar’s home page includes a link to additional information about Academic Policies: http://bulletin.berkeley.edu/academic-policies/

BSTS AUTHORSHIP GUIDELINES

The leading author should propose the authors’ list. All authors should agree to the list. To determine whom to include the Vancouver protocol (aka ICME) for authorship shall be followed. A summary: Authorship credit should be based only on contributions to one or more of the following: 1) formulation of theory and prediction; 2) contribution to conception and design; 3) acquisition, analysis, and interpretation of data; 4) drafting the article or revising it critically for important intellectual content. Honorary and ghost authorship are not allowed.

• Order of authorship should consider the relative contributions of authors to the intellectually most critical aspects of the work. Contributions that give in decreasing importance should be: 1) the conception of the work being represented by the article, design of the work, analysis, and interpretation of data or other evidence presented in the article; followed by 2) drafting the article or revising it for critically important content; and 3) approving the final version of the article. The first author should have made major contributions in 1 and 2. The following sequence of authors should represent progressively lesser contributions. Typically but not necessarily, the last author(s) could be the team leader(s), the one who is the project lead, theme lead or who secured funding for the project. Yet, it will be decided by the first author and the rest of the other contributors.

• Other individuals who have participated in the generation of the research paper but who do not meet the criteria for authorship should be listed in the acknowledgment section with a brief indication of the nature of their contribution.

• Corresponding author (guidelines simplified from Nature). The corresponding author is responsible for communicating with the journal and with managing communication between coauthors. The corresponding author is responsible for the contributions to the manuscript from that team. This responsibility includes, but is not limited to: (1) ensuring that original data upon which the submission is based is preserved and retrievable for reanalysis; (2) approving data presentation as representative of the original data; (3) foreseeing and minimizing obstacles to the sharing of data, materials, algorithms or reagents described in the work; and (4) get
approval for submission from all the co-authors before submitting the manuscript. Post-submission corresponding author’s responsibility includes: 1) ensuring the accuracy of all content in the proof, in particular, that names of coauthors are present and correctly spelled, and that addresses and affiliations are current; 2) be the point of contact for queries about the published paper; and 3) informing all coauthors of matters arising and to ensure such matters are dealt with promptly. The name and e-mail address of this author are published in the paper.

• List of authorship should be decided before the kick-start of the paper. Any change (adding or removing) to the authorship list should be informed and agreed upon among all contributors. The final order of authorship should be decided at least before the submission of the paper.

• All authors should disclose relationships that could be viewed as presenting a potential conflict of interest. Authors are responsible for disclosing all financial and personal relationships between themselves and others that might bias their work. Authors shall explicitly state if potential conflicts do or do not exist. This could be done in the journal's COI notification page or in the accompanying cover letter.

• Credit author statement. Some journals require a method to recognize individual author contributions. If available, this should be used. The corresponding author is responsible for ensuring that the descriptions are accurate and agreed by all authors. The role(s) of all authors should be listed, using relevant categories (this may change by journal): conceptualization, methodology, software, validation, formal analysis, investigation, resources, data curation, writing original draft, writing review and editing, visualization, supervision, project administration, funding acquisition). Authors may have contributed in multiple roles. More details here.

BSTS Authorship Guidelines 2022